

*In November of 2007, NEBHE hosted a regional summit on college readiness and success held at the Federal Reserve Bank of Boston with support from the Nellie Mae Education Foundation. This successful convening of more than 300 higher education and K-12 leaders, policy makers and educators had one focus: to determine how the New England states measure up in terms of college readiness, access and success. The national experts who led the panels that day have contributed the articles that follow to provide us with a recap of these important discussions.*

# Improving College Preparation

## Lessons From the American Diploma Project

BY MICHAEL COHEN

**S**uccessful completion of some postsecondary education is increasingly important in today's global economy. Individuals with two- or four-year college degrees earn more and are less likely to experience unemployment than their less well-educated peers. Likewise, states—and nations—with larger numbers and percentages of adults with postsecondary degrees will be better equipped to innovate, compete and create rewarding jobs and address the complex civic, social and technological challenges facing modern societies.

Yet far too many young people who graduate from high school and enter postsecondary education are ill prepared, and their chances for success in college are diminished significantly. Nationally, 30 percent of first year students in 2- and 4-year institutions lack the basic skills needed to enter credit-bearing courses and are instead required to take developmental courses in math, writing or reading. The likelihood of earning a degree is significantly lower than for their better-prepared peers. A recent ACT study estimates that only half of college-bound students are ready for college-level reading.

A 2004 national survey revealed that 40 percent of recent high school graduates enrolled in college reported significant gaps in their academic preparation for the work they were expected to do. The same students in large numbers reported that they would have worked harder and taken more challenging courses if such courses had been required. The same Peter Hart

survey showed that faculty estimated 42 percent of first year students in credit-bearing courses are academically unprepared to succeed in those courses.

The disconnect of academic expectations between postsecondary education and K-12 is one of the primary reasons for the poor preparation of so many high school graduates. Our separate systems of K-12 and higher education fail to provide both clear and accurate signals about the knowledge and skills students must acquire and a seamless transition from one system to the other.

The American Diploma Project, led by Achieve in partnership with the Education Trust and the Thomas B. Fordham Foundation, was launched in 2002 to conduct research and policy analysis that could help states improve preparation for postsecondary education and careers. This article summarizes key ADP research findings as well as our experience in working with more than 30 states to translate research into action.

### Expectations Gap

Evidence of this expectations gap is abundant. Consider the following:

**Academic Standards.** Research with college faculty and employers shows that high school standards and expectations do not match up with the core academic knowledge and skills needed to enter and succeed in postsecondary education and the workforce. For example, high school graduates must be able to:

- Synthesize information from multiple informational and technical sources and draw conclusions based on evidence from these sources, yet

high school English language arts standards often place little emphasis on reading and comprehending complex informational text, particularly in comparison to the attention paid to literature.

- Carry out research projects, including defining a researchable problem, gathering and evaluating the credibility and validity of data from a variety of sources, and producing a written analysis that marshals evidence in support of a clear thesis statement and related claims—skills that are rarely incorporated into high school standards and curriculum for all students.
- Solve problems using basic theorems in geometry and by converting verbal information into appropriate mathematical models or systems of equations and solving and interpreting them accurately and appropriately—yet in many states high school standards do not incorporate these reasoning and problem solving skills.
- Use statistical thinking and apply basic concepts of probability to develop and evaluate inferences, make predictions and draw conclusions from data. Again, few state academic standards incorporate data, probability and statistics.
- **Curriculum and High School Graduation Requirements.** The mathematical knowledge and skills required for success in postsecondary education are typically taught in a rigorous, four-year course sequence including Algebra I, Geometry, Algebra II and a course that includes

data, probability and statistics. In 2004, when Achieve surveyed the graduation requirements in all 50 states, only two – Texas and Arkansas – required students to take math through Algebra II in order to earn a high school diploma, and these requirements had been adopted just recently. At the time, most states required students to take two or three years of math, and frequently did not specify the mathematical content they needed to learn. Only a handful required students to take math courses that included the content typically found in Algebra I and Geometry.

**High School Testing.** College-bound high school students take a lot of tests, but few if any tell them if they are prepared for college-level work. In every state, students take state tests for school accountability purposes; in nearly half the states students must pass tests in order to earn a high school diploma. These tests are typically given in the tenth grade, and generally measure eighth and ninth grade level skills rather than the advanced reasoning and problem solving skills required for success in the college classroom. Not surprisingly, postsecondary institutions pay no attention to the scores students earn on these tests.

Students who make their way through these tests, graduate from high school, and enroll in college face a battery of placement tests, and some 30 percent learn only then that they are not yet “college-ready” and must take remedial rather than credit-bearing courses.

### The American Diploma Project: Closing the Expectations Gap

Poorly aligned expectations need not be a permanent condition, though it requires a systemic solution. Governors and chief state school officers have critical roles to play in changing policies that affect K-12 education. However, without strategic leadership from the higher education community in each state, meaningful change will not occur. Over the past three years, 32 states – educating nearly three

quarters of America’s public school students – have joined the American Diploma Project Network, including Rhode Island, Massachusetts, Maine and Connecticut. State leadership from governors’ offices, K-12, postsecondary and business formed the ADP Network to help advocate for, design and implement policies that will ensure that students leave high school prepared for college and careers.

Admission to the ADP Network requires the commitment of state leaders to align the expectations for graduating from high school with the demands of college and work. Specifically, the ADP Network states have committed to taking action on four policy priorities:

- 1. Aligning high school standards with the knowledge and skills required for success after high school.** This requires anchoring high school standards to real-world college and workplace expectations.
- 2. Requiring all graduates to take a rigorous curriculum, aligned with state standards that prepare them for life after high school.** ADP calls for four years of grade-level English, including literature, writing, reasoning, logic and communications skills; and four years of math, including courses that cover the content typically found in Algebra I and II, geometry, data analysis and statistics. The content matters most; course titles and Carnegie units are important only insofar as they effectively organize and help teachers deliver rigorous content.
- 3. Streamlining the assessment system so that the tests students take in high school also can serve as placement tests for college.** This means that states should give all high school students an assessment—before their senior year—that measures readiness for credit-bearing postsecondary courses and 21st century jobs. Such assessments should enable schools to fill learning gaps prior to graduation, reducing the need for remediation, eliminating unnecessary tests and

increasing the likelihood of postsecondary success

- 4. Holding high schools accountable for graduating students who are ready for college and careers, and holding postsecondary institutions accountable for students' success once enrolled.** To do this, states must develop longitudinal data systems that track individual student progress, providing early warning indicators of students at risk of failing to graduate, and support effective transitions from secondary to postsecondary education and beyond.

Each state develops its own plan to carry out the shared policy agenda. Nationally, the leaders of the American Council on Education (ACE), the National Association of System Heads (NASH), and the State Higher Education Executive Officers (SHEEO) have joined with Achieve to promote higher education involvement in each ADP Network state's policy agenda.

Over the past several years, states have made considerable progress on key parts of this policy agenda. Currently 19 states, including Rhode Island, have aligned high school standards with postsecondary demands, and 22 states are in the process of doing so. Eighteen states and the District of Columbia have defined a core college and work curriculum and require students to complete that curriculum in order to earn a high school diploma, an increase of 15 states since 2005. Nine states administer high school assessments also used by higher education to place incoming students. Eight states report that they have P-20 longitudinal data systems in place, capable of tracking an individual student's progress from Pre-K through college graduation. These data systems are essential for system improvements and accountability.

### Implications for Higher Education

Higher education systems and institutions have played critical leadership roles in the states that have made progress on the ADP policy agenda.

From their leadership we have learned it is essential for higher education to:

**Establish a single statewide standard for college readiness for all 2- and 4-year public institutions.** In many states private institutions will want to voluntarily participate in this effort. While it may seem difficult, higher education and high school faculty working together are quite capable of defining the essential knowledge and skills. Further, as more higher education systems adopt articulation and transfer agreements, defining common entry standards into credit-bearing courses helps promote a consistent level of learning within the courses.

Through the leadership of state higher education executive officers, Indiana, Kentucky, Georgia, and Rhode Island, among other states, have established statewide college-ready standards. They have accomplished this by bringing together faculty who teach first-year arts and science courses, those responsible for making placement decisions, and high school faculty, to review the work students do in introductory courses, the high school curriculum, data on the success of first year students, national models of college-ready standards developed by College Board, ACT and ADP, and other relevant evidence. Out of their efforts, the K-12 and postsecondary systems were able for the first time to adopt jointly-owned academic standards.

**Work with the K-12 system to put in place eleventh grade tests that are aligned with state standards, and that can be used to inform placement decisions.** Assessments define standards in concrete terms, and are used to set the level of performance that constitutes "good enough" against the standard. The state postsecondary system must work with the state secondary schools to identify and implement eleventh grade assessments, with a statewide cut score, that can provide individual students and postsecondary institutions with information that can be used to determine if a student is

ready to take credit-bearing courses. There are a number of ways to do this.

The California State University System, working in partnership with the California Department of Education, has added additional items to the state's eleventh grade math and English school accountability tests to align the tests with CSU placement standards. The tests provide an early warning signal to students, who can take the additional items on a voluntary basis. CSU guarantees placement into credit-bearing courses to students who score well enough, and exempts them from additional tests to determine if they need remediation once enrolled. Perhaps more important, CSU has worked with secondary schools to provide senior year courses for students to make up skill deficiencies if they do not score well enough to meet the college ready standard. This approach should help reduce the need for remediation, though it is too early in the program to have data to bear this out.

Other states are taking different approaches. A number of states are incorporating the ACT or SAT into the state high school assessment system, since large numbers of students

Massachusetts and Rhode Island, have collaborated in the development of the American Diploma Project common end-of-course exam in Algebra II. This test, to be administered for the first time in the spring of 2008, will help schools improve curriculum and instruction, and will provide postsecondary institutions with results that can help determine readiness for credit-bearing courses.

**Enable and encourage higher education faculty to work closely with high school faculty on curriculum issues.** College faculty are in a unique position to help high school faculty understand deeply the knowledge and skills their students need to be well prepared for college. By working together to review college syllabi and examples of the work college students do in first year courses, high school teachers can get a much better sense of how to prepare their students, and how well they need to be prepared in order to succeed.

There is an emerging national consensus on the need for a rigorous system of high school graduation standards, curriculum and assessments aligned with college readiness,

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already take them. These admissions tests were not designed to be used as placement tests, though they often are. To be used effectively for these purposes and as an integral part of the high school assessment system, they may need to be augmented with additional items to align well with state standards (a process that Maine is engaged in with the SAT). In addition, state postsecondary systems must establish college-ready cut scores, and provide feedback about readiness (not just admissions) to students while they are still in high school.

Thirteen states, including

and growing momentum among the states to translate consensus into concrete action. Though our postsecondary and elementary and secondary education systems typically operate in isolation from each other, action at the state level is resulting in an unprecedented degree of cross-sector cooperation around these core issues. If policy action is to be translated into better results for students and institutions, the continued leadership of higher education will be essential.

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